

**AMENDMENTS TO THE CLAIMS**

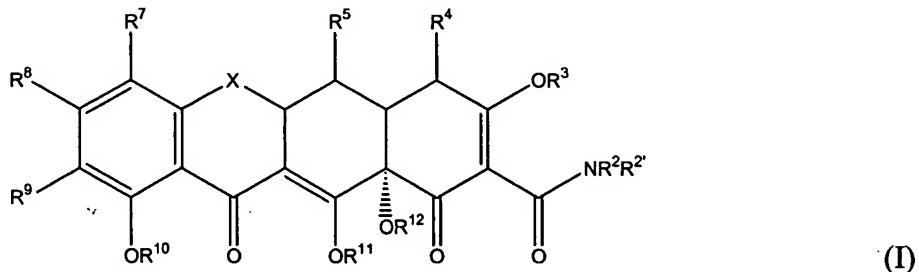
This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

1.     **(Original)**   A method for treating a subject for a DTMR, comprising:  
                      administering to said subject an effective amount of a tetracycline compound, such that said DTMR is treated.
2.     **(Original)**   The method of claim 1, wherein said effective amount is effective to modulate translation of said subject's RNA.
3.     **(Original)**   The method of claim 1, wherein said effective amount is effective to modulate the half-life of said subject's RNA.
4.     **(Original)**   The method of claim 1, wherein said effective amount is effective to affect message translocation.
5.     **(Original)**   The method of claim 1, wherein said effective amount is effective to modulate the binding of proteins to said subject's RNA.
6.     **(Original)**   The method of claim 1, wherein said effective amount is effective to modulate splicing of said subject's RNA.
7.     **(Cancelled)**
8.     **(Original)**   The method of claim 1, wherein said subject is an animal.
9.     **(Cancelled)**
10.    **(Original)**   The method of claim 7, wherein the amount of at least one protein is modulated in the subject.

11. **(Original)** The method of claim 1, wherein the tetracycline compound is a substituted tetracycline compound.

12.-35. **(Cancelled)**

36. **(Original)** The method of claim 1, wherein said substituted tetracycline compound is of the formula (I):



wherein

R<sup>2</sup>, R<sup>2'</sup>, R<sup>4'</sup>, and R<sup>4''</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R<sup>2'</sup>, R<sup>3</sup>, R<sup>10</sup>, R<sup>11</sup> and R<sup>12</sup> are each hydrogen, alkyl, alkenyl, alkynyl, substituted carbonyl, or a pro-drug moiety;

R<sup>4</sup> is NR<sup>4'</sup>R<sup>4''</sup>, alkyl, alkenyl, alkynyl, hydroxyl, halogen, or hydrogen;

R<sup>5</sup> is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaryl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carboxyloxy, or aryl carboxyloxy;

R<sup>6</sup> and R<sup>6'</sup> are each independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R<sup>7</sup> is hydrogen, hydroxyl, halogen, thiol, nitro, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, acyl, aminoalkyl, heterocyclic, thionitroso, or -(CH<sub>2</sub>)<sub>0-3</sub>NR<sup>7c</sup>C(=W')WR<sup>7a</sup>;

R<sup>8</sup> is hydrogen, hydroxyl, halogen, thiol, nitro, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, amino, arylalkenyl, arylalkynyl, acyl, aminoalkyl, heterocyclic, thionitroso, or -(CH<sub>2</sub>)<sub>0-3</sub>NR<sup>8c</sup>C(=E')ER<sup>8a</sup>;

$R^9$  is hydrogen, hydroxyl, halogen, thiol, nitro, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, acyl, aminoalkyl, heterocyclic, thionitroso, or  $-(CH_2)_{0-3}NR^{9c}C(=Z')ZR^{9a}$ ;

$R^{7a}$ ,  $R^{7b}$ ,  $R^{7c}$ ,  $R^{7d}$ ,  $R^{7e}$ ,  $R^{7f}$ ,  $R^{8a}$ ,  $R^{8b}$ ,  $R^{8c}$ ,  $R^{8d}$ ,  $R^{8e}$ ,  $R^{8f}$ ,  $R^{9a}$ ,  $R^{9b}$ ,  $R^{9c}$ ,  $R^{9d}$ ,  $R^{9e}$ , and  $R^{8f}$  are each independently hydrogen, acyl, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

$R^{13}$  is hydrogen, hydroxy, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, aryl, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

E is  $CR^{8d}R^{8e}$ , S,  $NR^{8b}$  or O;

E' is O,  $NR^{8f}$ , or S;

W is  $CR^{7d}R^{7e}$ , S,  $NR^{7b}$  or O;

W' is O,  $NR^{7f}$ , or S;

X is  $CHC(R^{13}Y'Y)$ ,  $C=CR^{13}Y$ ,  $CR^{6'}R^6$ , S,  $NR^6$ , or O;

Y' and Y are each independently hydrogen, halogen, hydroxyl, cyano, sulphydryl, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

Z is  $CR^{9d}R^{9e}$ , S,  $NR^{9b}$  or O;

Z' is O, S, or  $NR^{9f}$ , and pharmaceutically acceptable salts, esters and enantiomers thereof.

37. **(Original)** The method of claim 36, wherein  $R^2$ ,  $R^{2'}$ ,  $R^8$ ,  $R^{10}$ ,  $R^{11}$ , and  $R^{12}$  are each hydrogen, X is  $CR^6R^{6'}$ , and  $R^4$  is  $NR^{4'}R^{4''}$ , wherein  $R^{4'}$  and  $R^{4''}$  are each methyl.

38. **(Original)** The method of claim 37, wherein  $R^9$  is hydrogen.

39. **(Original)** The method of claim 38, wherein  $R^7$  is substituted or unsubstituted aryl.

40. **(Original)** The method of claim 39, wherein  $R^7$  is substituted or unsubstituted phenyl.

41. **(Original)** The method of claim 40, wherein  $R^7$  is substituted with one or more substituents.

42. **(Original)** The method of claim 41, wherein said substituents are each independently alkyl, alkenyl, alkynyl, halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxy carbonyloxy, aryloxycarbonyloxy, carboxylate, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, alkylthiocarbonyl, alkoxyl, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, alkylsulfinyl, sulfonato, sulfamoyl, sulfonamido, nitro, trifluoromethyl, cyano, azido, heterocyclyl, alkylaryl, aryl or heterocyclic moiety.

43. **(Original)** The method of claim 38, wherein R<sup>7</sup> is substituted or unsubstituted alkenyl.

44. **(Original)** The method of claim 37, wherein R<sup>7</sup> is substituted or unsubstituted heteroaryl and R<sup>9</sup> is alkyl.

45. **(Original)** The method of claim 36, wherein R<sup>7</sup> is dialkylamino.

46. **(Original)** The method of claim 45, wherein R<sup>9</sup> is alkylamino.

47. **(Original)** The method of claim 45, wherein R<sup>9</sup> is -NR<sup>9c</sup>C(=Z')ZR<sup>9a</sup>, wherein R<sup>9c</sup> is hydrogen, Z' is nitrogen or oxygen, Z is NH, and R<sup>9a</sup> is aryl or aralkyl.

**48.-53. (Cancelled)**

54. **(Currently Amended)** The method of claim 1 or 48, wherein said tetracycline compound is a tetracycline compound of Table 2.

**55. (Cancelled)**

**56. (Cancelled)**

57. (New) The method of claim 1, wherein said tetracycline compound is:

